Hydrogen-containing Fluorosilicone Fluid LF-HF12

Description:

Chemical Name: Hydrogen-containing Fluorosilicone Fluid

Hydrogen-containing Fluorosilicone Fluid is a fluorine-modified polysiloxane with reactive Si–H groups and methyl/fluoroalkyl side chains.

It combines excellent fuel, oil, and chemical resistance with chemical reactivity, allowing crosslinking, surface bonding, or functional modification via hydrosilylation or condensation.

The product is suitable for high-performance, reactive applications such as advanced sealing, coatings, surface treatments, and specialty formulations.

Special Features:

- A reactive fluorosilicone polymer with Si–H functionality, capable of catalytic reaction with vinyl-containing materials;
- Provides outstanding water and oil resistance, making it suitable for oil-resistant, aging-resistant, and electrically insulating fluorosilicone rubber applications.

Typical Technical Properties:

Test Item	Standard			
	Methyl end-capped hydrofluorosilicone oil		End side hydrofluorosilicone oil	
	LF-HF121	LF-HF122	LF-HF12A	LF-HF12B
Appearance	Colorless to yellowish transparent liquid			
Viscosity (25°C, mPa.s)	30~100	30~100	30~50	30~50
Hydrogen Content %	0.20	0.70	0.40	0.20
Specific Gravity (25°C, g /cm3)	1.07±0.02		1.05±0.02	
Refractive index (25°C)	1.390±0.01			
Volatile (% / 200°C, 4h)	<5			
Flash Point (°C)	>230			

* Can customize the production of hydrogen -containing silicone oil according to the requirements.

Applications:

1. Crosslinker for FVMQ/LSR: Critical curing agent for addition-cure fluorosilicone systems, ensuring optimal cure response and physical properties.
2. Filler Treatment: Treats fillers and glass surfaces to improve wetting, dispersion, and moisture

resistance.

3. Chemical Synthesis: Key starting material for the production of modified fluorosilicone copolymers through Si-H reactivity.
4. Coating Enhancer: Provides anti-stick properties and chemical resistance in specialty solvent-based coatings.

Package &Storage:

In 5kg, 25kg and 50kg drum

Keep in cool, dry and ventilated place. Keep in unopened containers, shelf life is 12 months from the date of production. Storage beyond the shelf life does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.